Stanford University

Department of Sociology

Report for MTurk Pilot: study version 2022/08/02

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Contents

List of Figures

List of Tables

1 Data collection

1.1 Completion time after cutting videos

We conducted a $n = 15$ pilot on Oct 10, a second $n = 15$ pilot on Oct 12, and a $n = 201$ study on on October 13-14, 2022 on MTurk.

Cutting the videos reduced the median response time from 17min 18s in first and second pilot to 16min 8s in the third pilot.

Table 1: Completion time

Study	Min	Median	Mean	Max	n
new (cut videos)	8min 59s	16min 8s	17min 25s	61min 58s	201
old (uncut videos)	3min 49s	17min 18s	19min 32s	40min 14s	33

1.2 Attention and manipulation checks

The responses from the first $n = 15$ pilot were discarded because respondents saw a different version of the study, i.e. that with the longer videos. The remaining 216 respondents completed attention and manipulation checks at an acceptable level.

- **Attention**: 216 out of 216 (100%) respondents selected the correct answer.
- **Mobility manipulation**: 211 out of 216 (97.69%) respondents selected the correct answer when asked about the availability of opportunities according to the vignette.
- **Subjective effort based mobility**: Respondents in the low mobility condition perceive mobility to be lower on average (31.9) than those in the high mobility condition (58.9) with $p < 0.01$.
- **Empathy manipulation**: In three survey items, respondents indicated on average more empathy towards the individuals in the homelessness videos when compared to those in the control videos with $p < 0.01$, $p < 0.01$, and $p < 0.01$ respectively.

The following analysis was conducted on 211 out of 216 initial observations.

1.3 Treatment assignment

Table 2: Assignment of 211 participants to combinations of survey quota and conditions

Party	n	Mobility Condition	n	Empathy Condition	n
Democrat	73	high	34	control	19
				treatment	15
		low	39	control	16
				treatment	23
Republican	69	high	35	control	12
				treatment	23
		low	34	control	24
				treatment	10
Independent	69	high	36	control	17
				treatment	19
		low	33	control	18
				treatment	15

1.4 Code book

1.4.1 Question text

Table 3: Key to dependent variables

Variable	Question Text
dv_gen_welfare_1	Welfare programs by the government are necessary to ensure fairness in our society.
dv_gen_welfare_2	The United States federal government is spending too much money on welfare.
dv_welfare_poor_hard_1	We should increase funds for government programs designed to care for poor people.
dv_welfare_poor_hard_2	We should expand government programs that help poor people access the basic resources they need.
dv_welfare_poor_hard_13	We should increase funds for government programs designed to give hard-working people a chance to advance economically.
dv_welfare_poor_hard_14	We should expand government programs that help hard-working people to get ahead in society.
dv_spec_welfare_pol_1	...expand access to food stamps.
dv_spec_welfare_pol_2	...increase federal funding for food banks.
dv_spec_welfare_pol_13	...invest more in the unemployment insurance (UI) system to help people who have lost their jobs.
dv_spec_welfare_pol_14	...improve access to health care for poor people.
dv_mobility_pol_1	...create a "baby bonds" program in which every American child receives a trust fund of $50,000 for college tuition, buying a home, or starting a business.
dv_mobility_pol_2	...increase financial aid so that more low-income students can attend college.
dv_mobility_pol_3	...increase government-funds for preschool programs.
dv_mobility_pol_10	...make public colleges and universities tuition-free.
dv_ineq_1	In your judgement, how large or small is the difference in income between the rich and the poor in the United States?

Table 4: Key to mediator variables

Variable	Question Text
empa_conc_1	Others' economic misfortunes do not disturb me that much.
empa_conc_2	I feel great concern for Americans born in poverty.
empa_conc_3	I don't feel very sorry for poor people.
empa_conc_4	I feel a great deal of empathy for poor Americans.
me_persp_tak_1	To really understand a poor person's situation, you need to "put yourself in their shoes."
me_persp_tak_2	I find it difficult to see things from a poor person's point of view.
me_persp_tak_3	Before judging someone in poverty, I think it is important to see things from their perspective.
me_situational_attr_1	me_situational_attr - Failure of society to provide good schools for Americans
me_situational_attr_2	me_situational_attr - Low wages in some businesses and industries
me_situational_attr_3	me_situational_attr - Failure of private industry to provide enough jobs
me_situational_attr_4	me_situational_attr - Prejudice and discrimination
me_dispos_attr_5	me_dispos_attr - Being taken advantage of by rich people
me_dispos_attr_6	me_dispos_attr - Lack of thrift and proper money management skills
me_dispos_attr_7	me_dispos_attr - Lack of effort by the poor themselves
me_dispos_attr_8	me_dispos_attr - Lack of ability and talent

1.4.2 Composite items

Table 5: Key to composite dependent variables

Label	Composite	Items
General	dv_gen_welfare	dv_gen_welfare_1, dv_gen_welfare_2rec
Food stamps	dv_spec_foodstamps	dv_spec_welfare_pol_1,dv_spec_welfare_pol_2
Insurance	dv_spec_insurance	dv_spec_welfare_pol_13,dv_spec_welfare_pol_14
For poor	dv_welfare_poor	dv_welfare_poor_hard_1,dv_welfare_poor_hard_2
For hard-working	dv_welfare_hard	dv_welfare_poor_hard_13,dv_welfare_poor_hard_14
Higher ed.	dv_mobility_highered	dv_mobility_pol_10,dv_mobility_pol_2
Preschool	dv_mobility_preschool	dv_mobility_pol_1,dv_mobility_pol_3

Table 6: Key to composite mediators

Label	Composite	Items
Empathetic concern	empa_conc	empa_conc_1rec, empa_conc_2, empa_conc_3rec, empa_conc_4
Perspective taking	persp_tak	me_persp_tak_1, me_persp_tak_3
Dispositional attribution	me_dispos_attr	me_dispos_attr_6, me_dispos_attr_7, me_dispos_attr_8
Situational attribution	me_situational_attr	me_situational_attr_2, me_situational_attr_3, me_situational_attr_4

1.5 Reliability

Table 7: Reliability for each of the two items used to form the composite scales for welfare policy support

| Composite | Cronbach's alpha | | Guttman's |
	raw	standardized	Lambda 6
General	0.86	0.86	0.75
Food stamps	0.95	0.95	0.91
Insurance	0.86	0.86	0.75
For poor	0.98	0.98	0.96
For hard-working	0.97	0.97	0.95
Higher ed.	0.84	0.85	0.74
Preschool	0.73	0.74	0.59

Table 8: Reliability for all items used to form the composite scales for mediators

| Composite | Cronbach's alpha | | Guttman's |
	raw	standardized	Lambda 6
Empathetic concern	0.89	0.89	0.89
Perspective taking	0.79	0.80	0.79
Dispositional attribution	0.70	0.71	0.70
Situational attribution	0.83	0.83	0.79

2 Descriptive statistics

2.1 Dependent variables

Note: The figures report the mean in the four groups and the associated standard error of the mean (se).

2.1.1 General welfare preferences
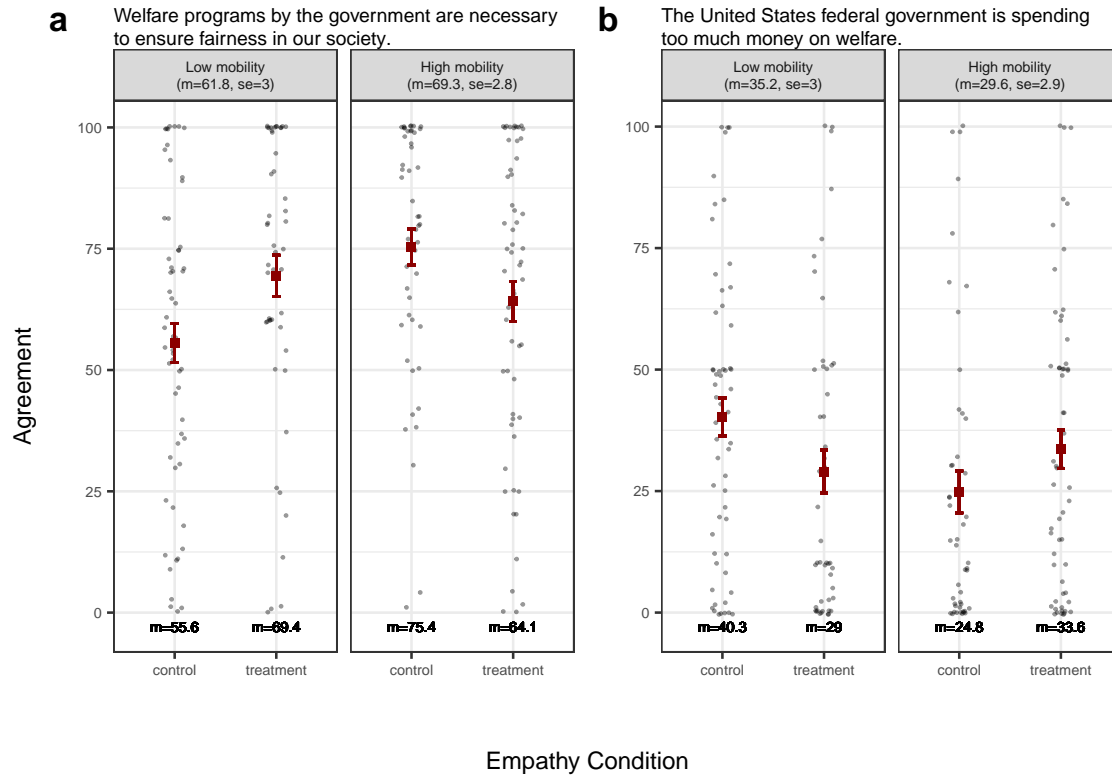
Figure 1: General welfare preferences

2.1.2 Specific welfare preference

Please rate how much you agree or disagree that the government should
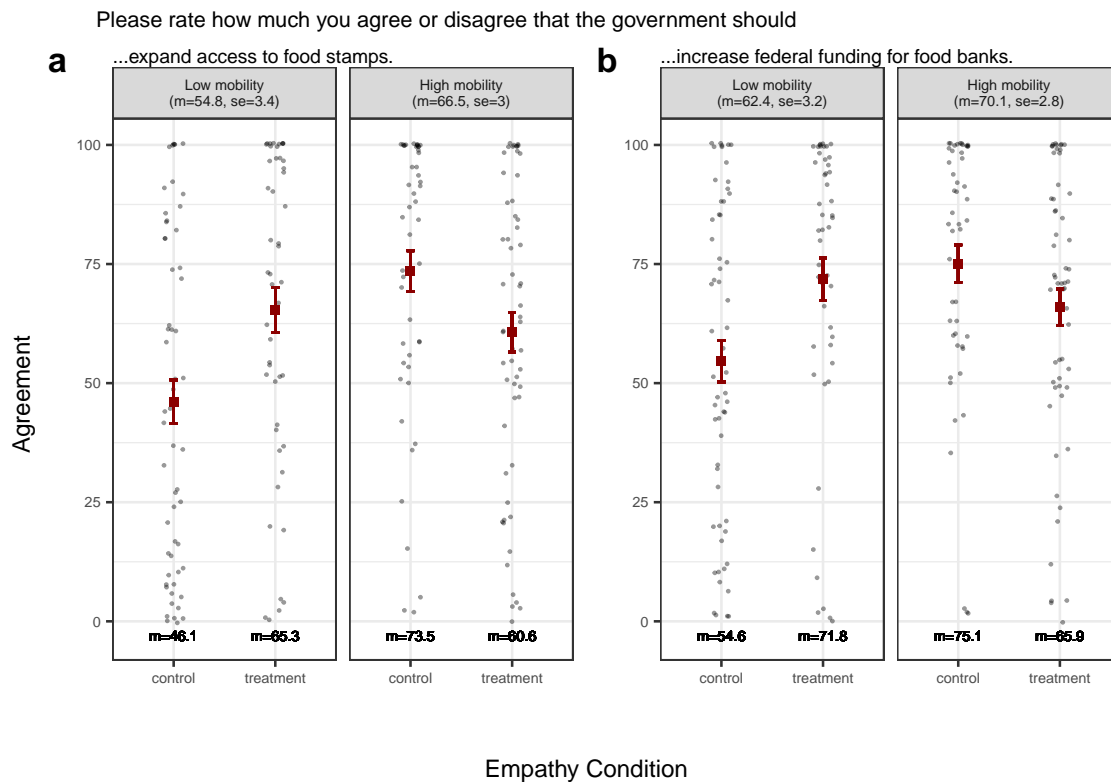
Figure 2: Specific welfare preferences: Food stamps and food banks

Please rate how much you agree or disagree that the government should
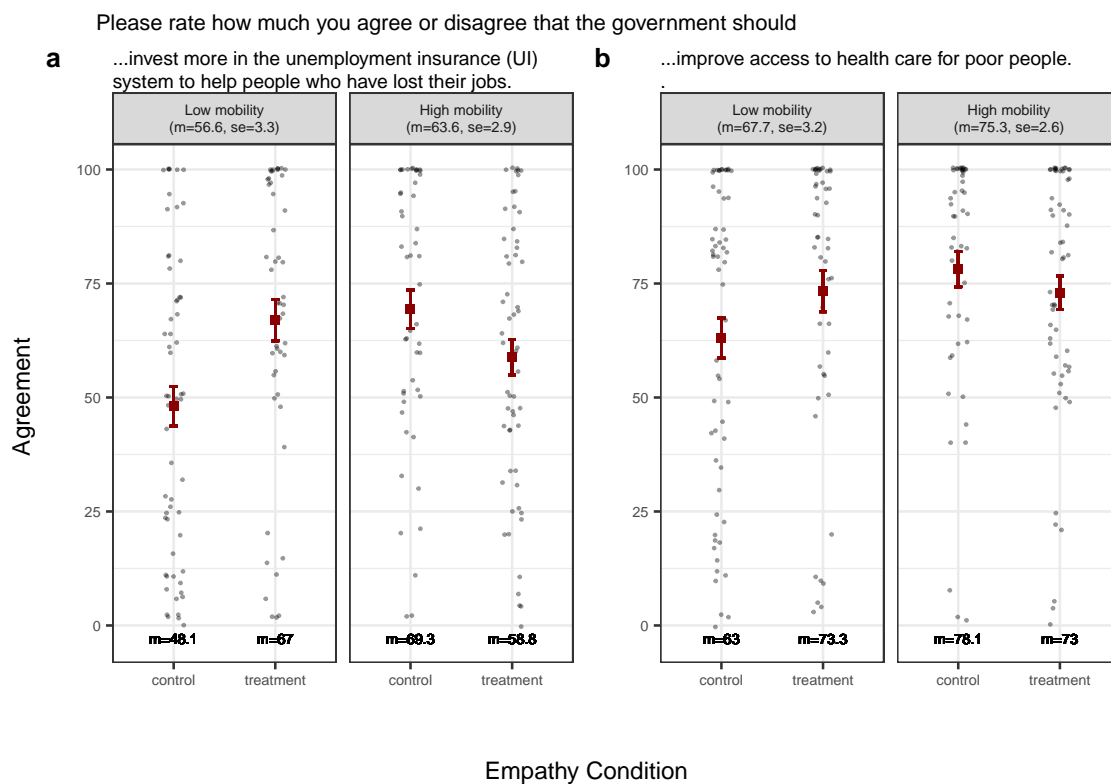
Figure 3: Specific welfare preferences: Unemployment Insurance and health care

2.1.3 Support for the poor

a We should increase funds for government programs designed to care for poor people.

b We should expand government programs that help poor people access the basic resources they need.
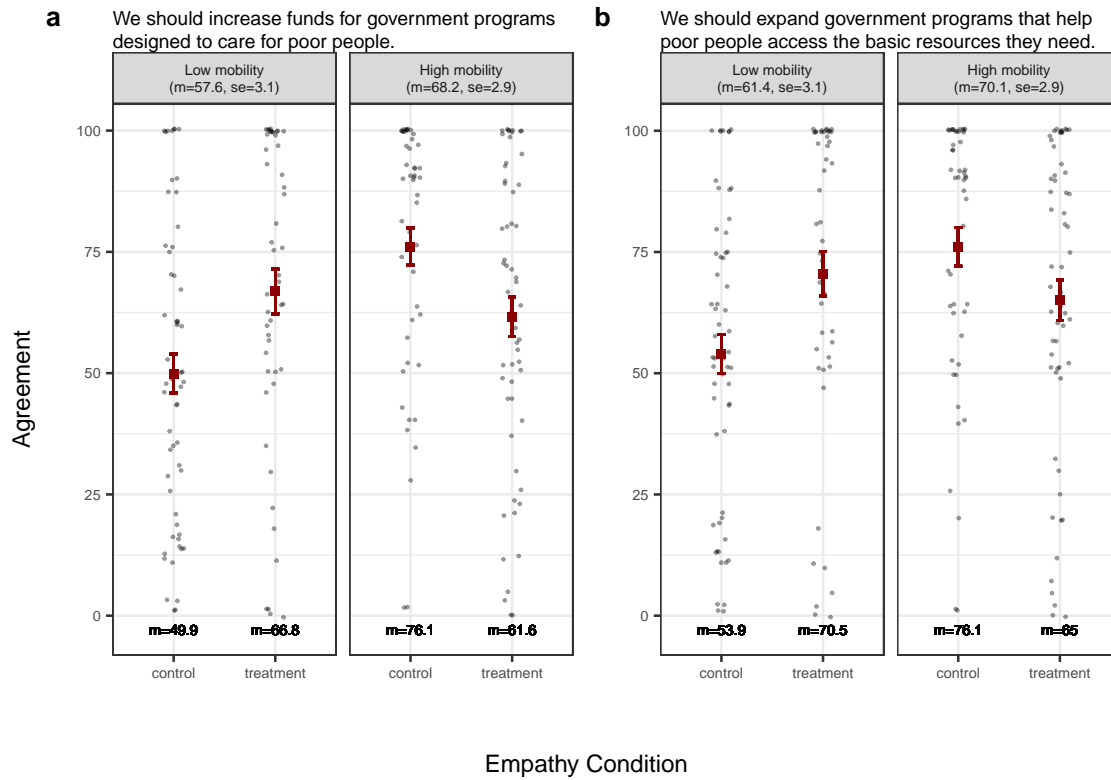
2.1.4 Support for hard-working people

a We should increase funds for government programs designed to give hard-working people a chance to advance economically.

b We should expand government programs that help hard-working people to get ahead in society.
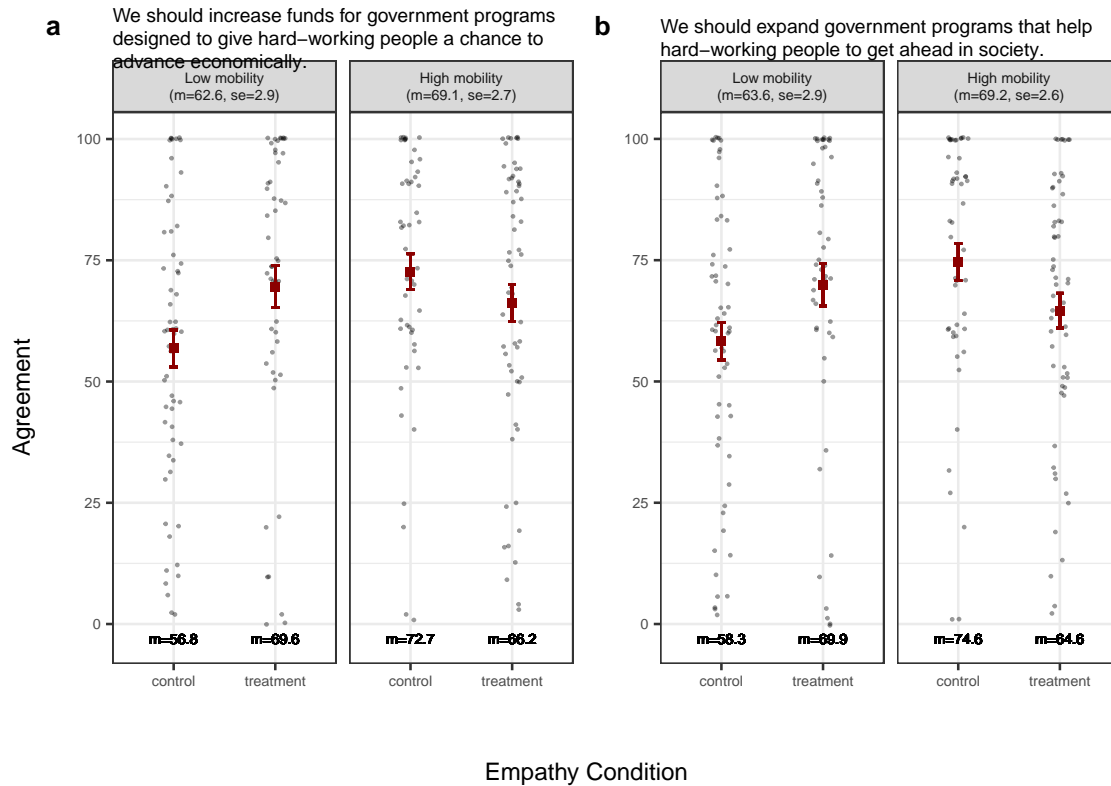
2.1.5 Social mobility policy
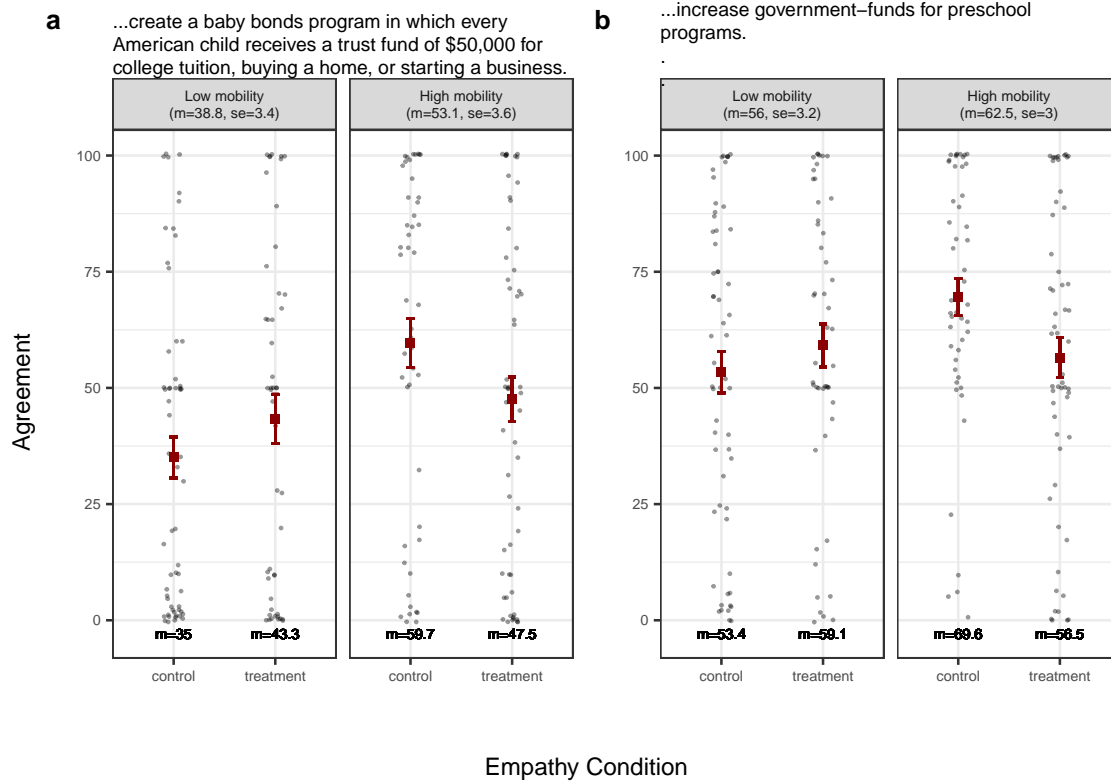
Figure 4: Social mobility policy: Childhood education
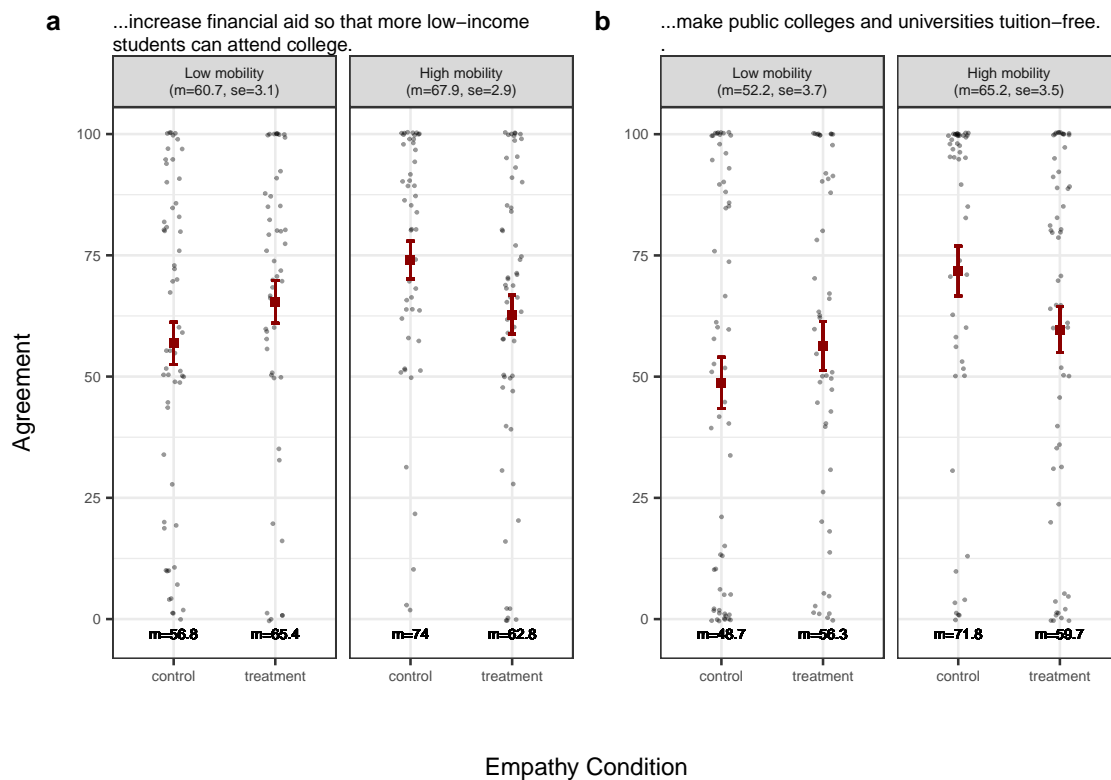
Figure 5: Social mobility policy: College education

2.1.6 Inequality

In your judgement, how large or small is the difference in income between the rich and the poor in the United States?
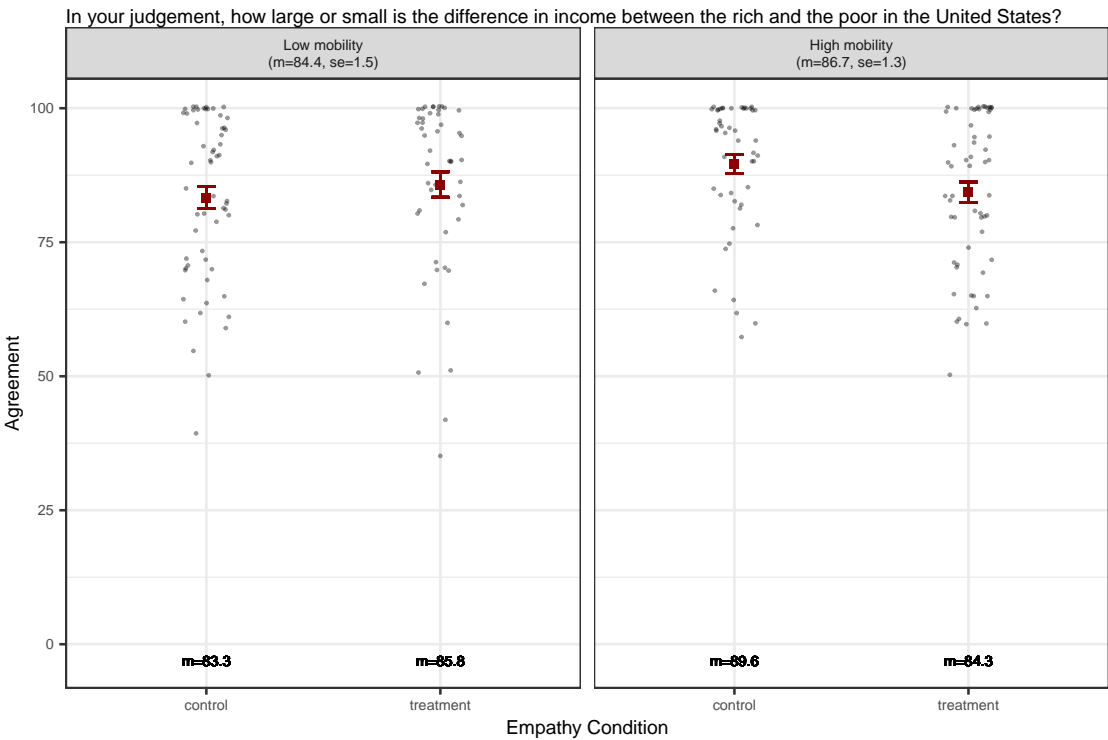
2.2 Mediators

2.2.1 Empathetic concern

Figure 6: Empathetic concern (1)
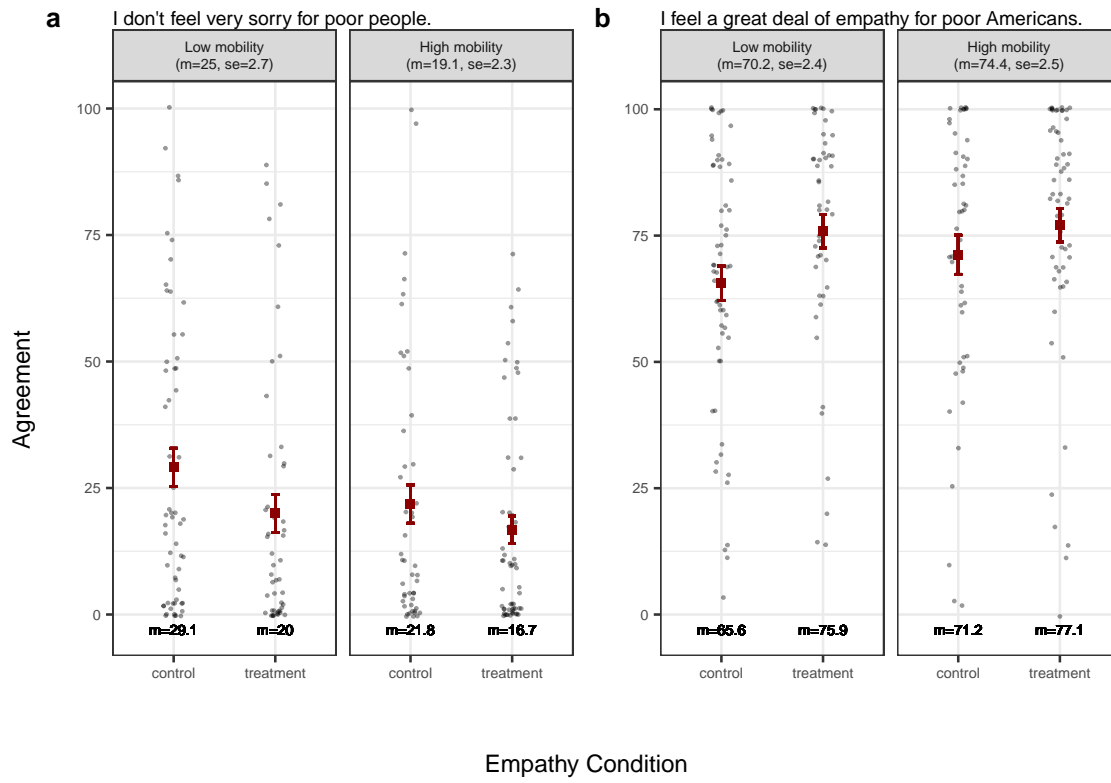
Figure 7: Empathetic concern (2)

2.2.2 Perspective taking
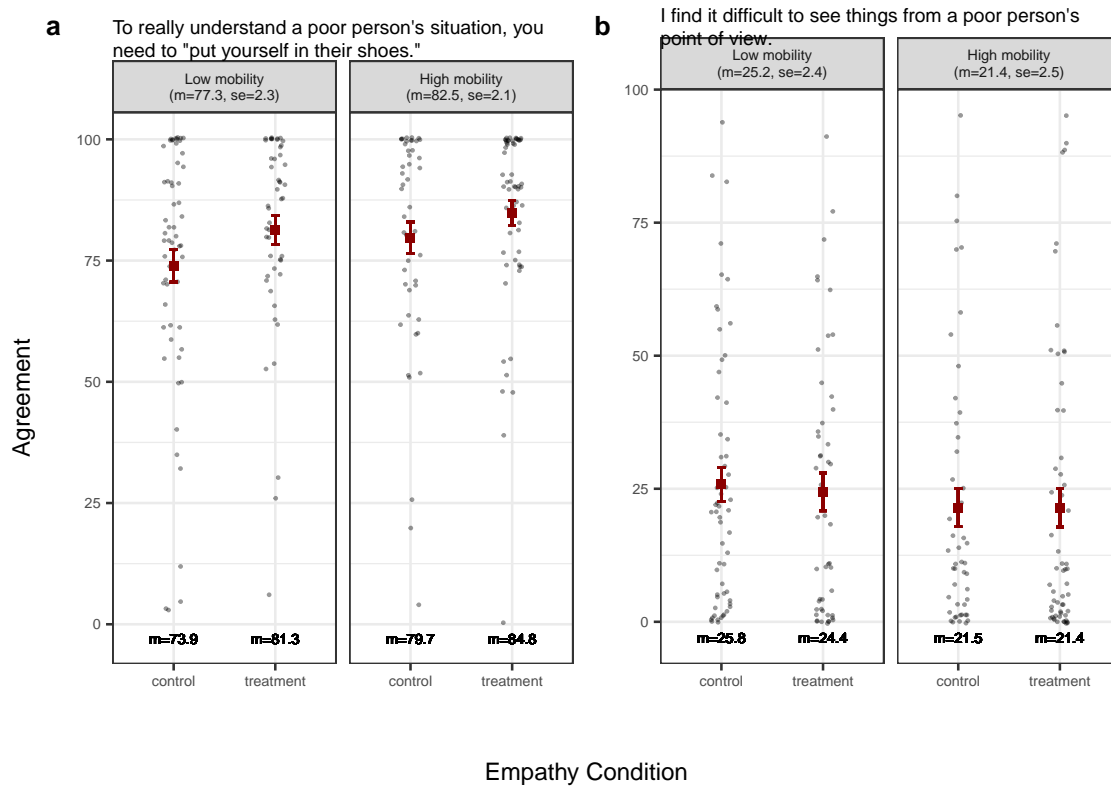
Figure 8: Perspective taking (1)

11
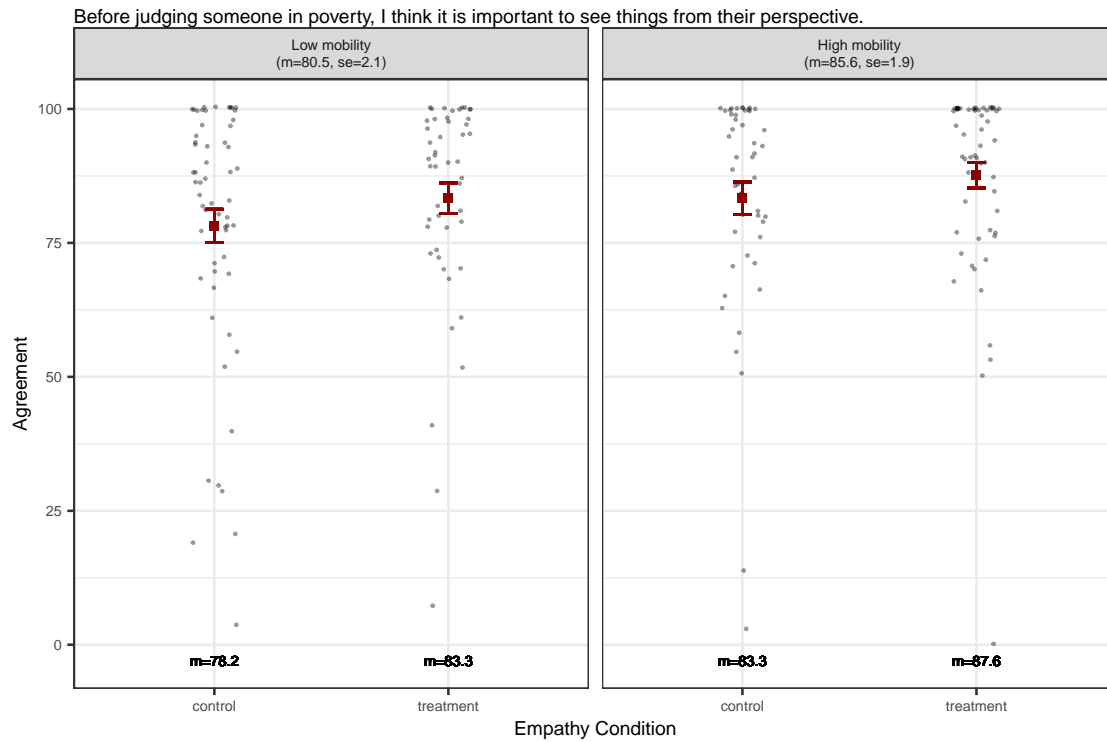
Figure 9: Perspective taking (2)

2.2.3 Situational attribution of poverty

Empathy Condition
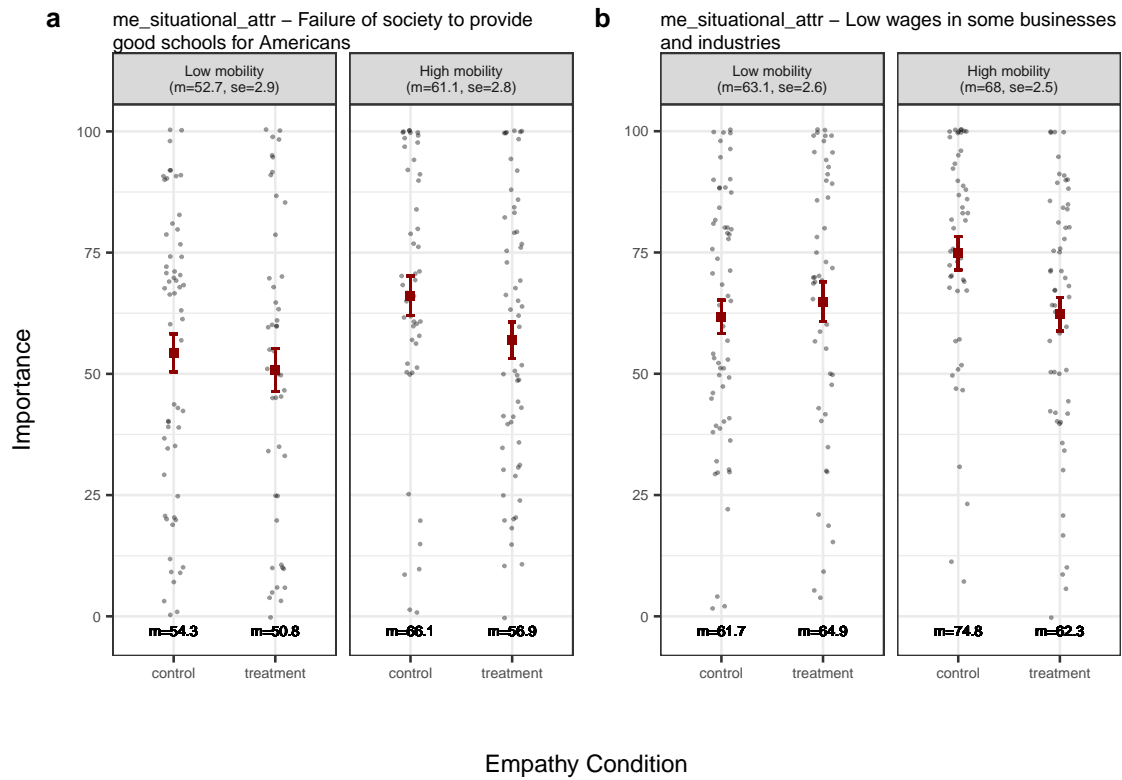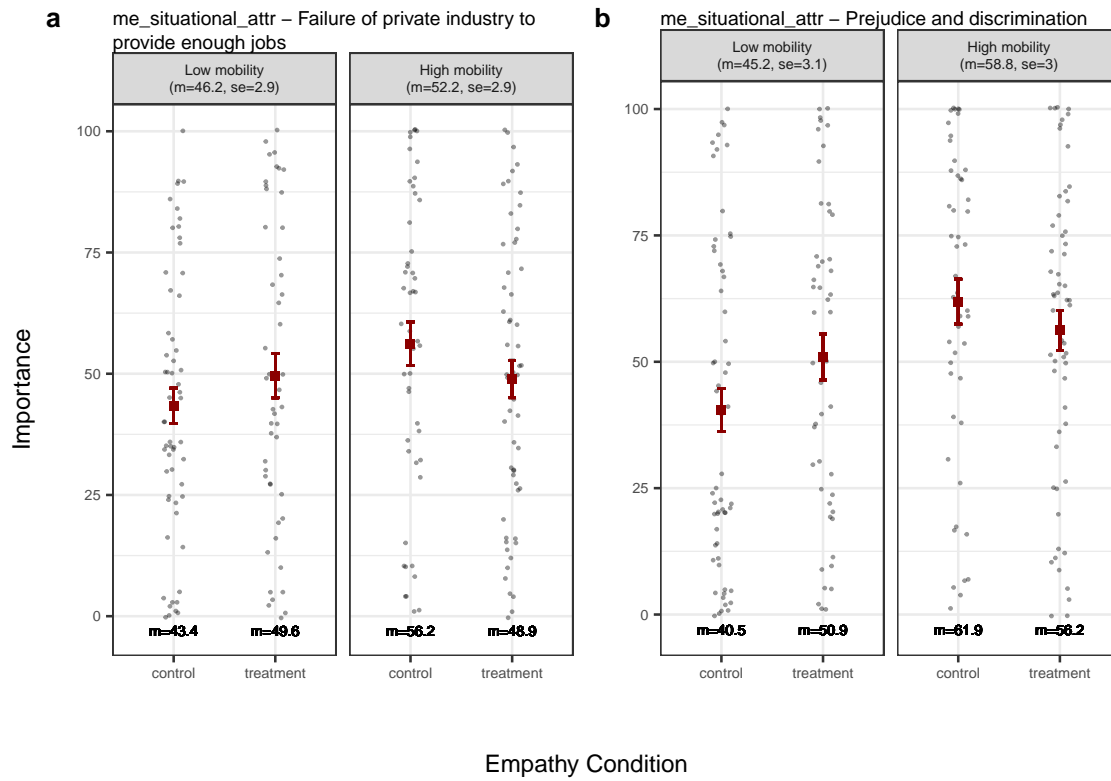
2.2.4 Dipositional attribution of poverty
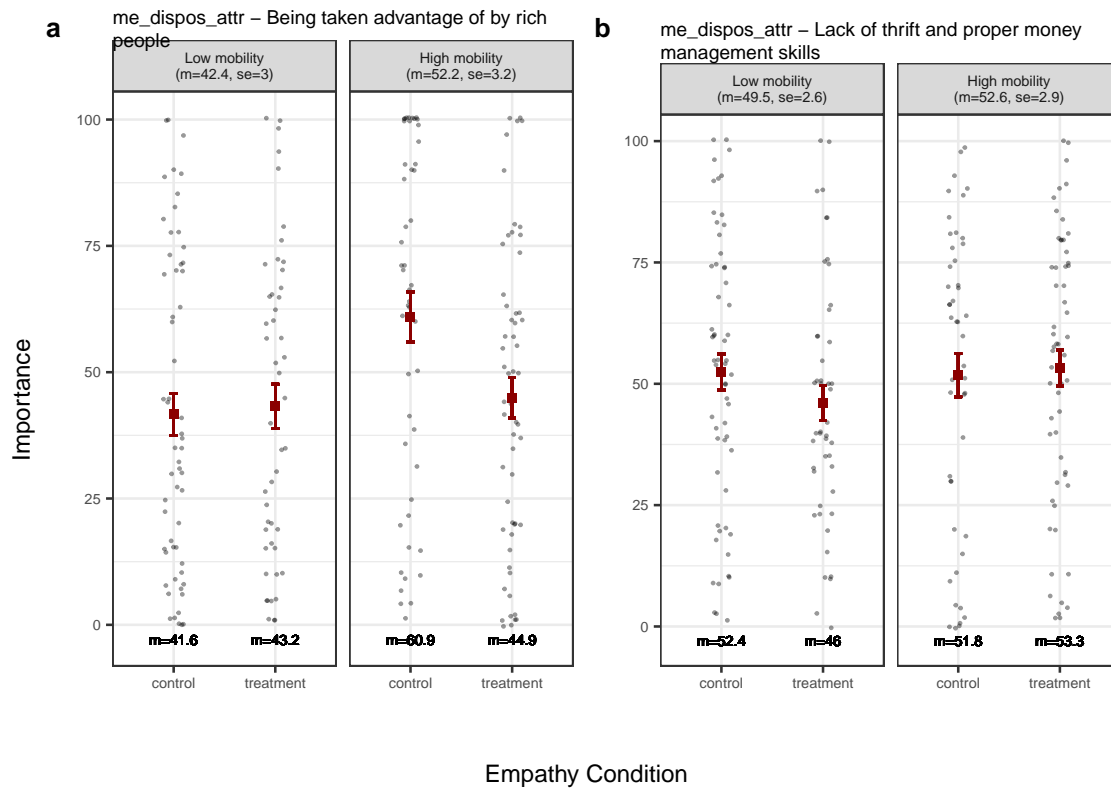
Figure 10: Dispositional attribution (1)

13
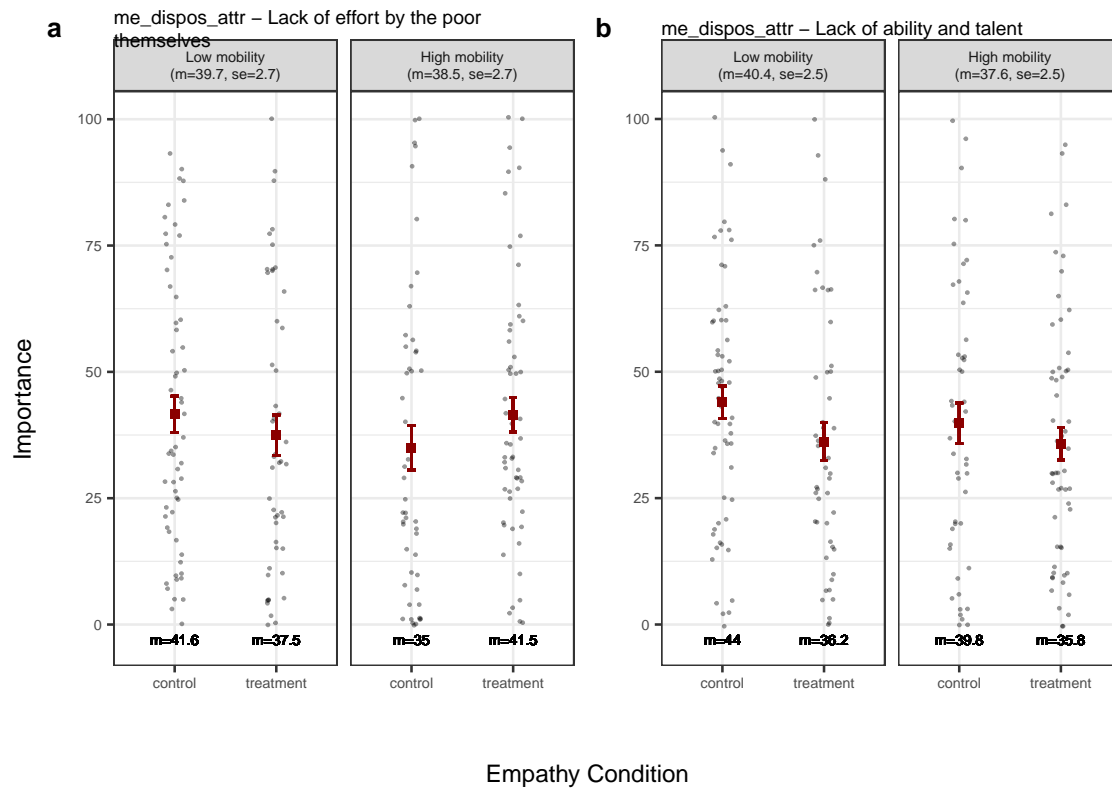
Figure 11: Dispositional attribution (2)

3 Regression analysis

3.1 Support for welfare policy
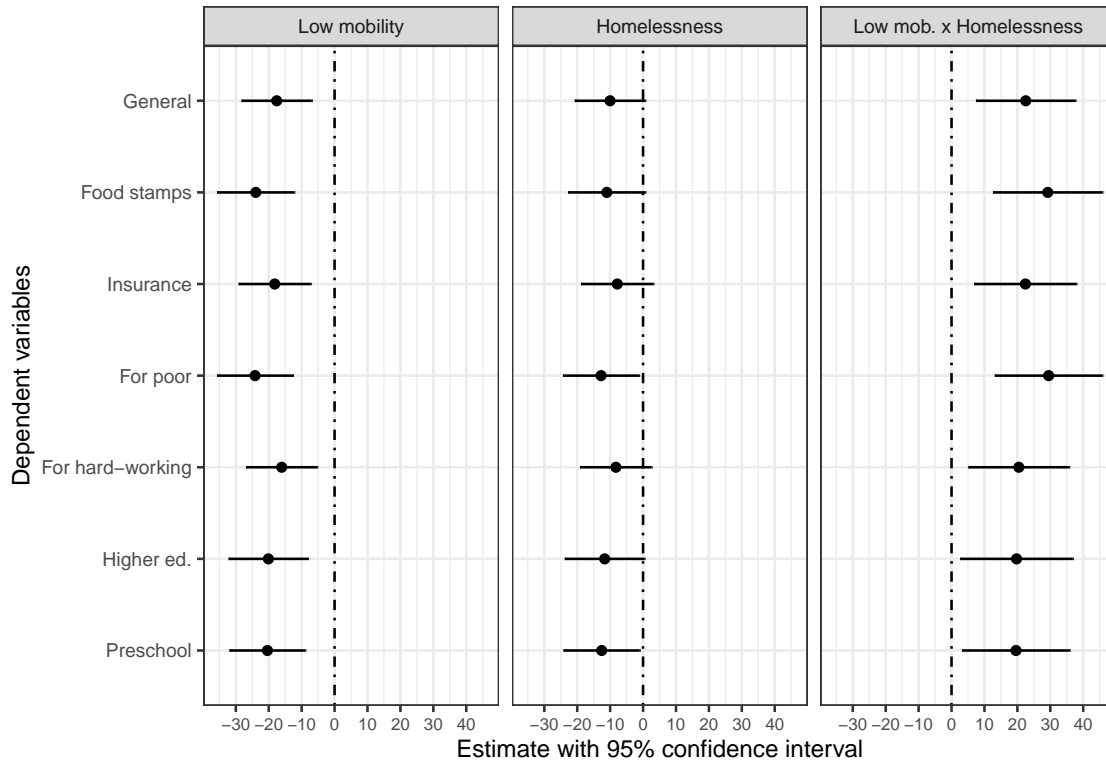
Figure 12: Effect plot for the two conditions and their interaction

Table 9: Regression table for welfare preferences

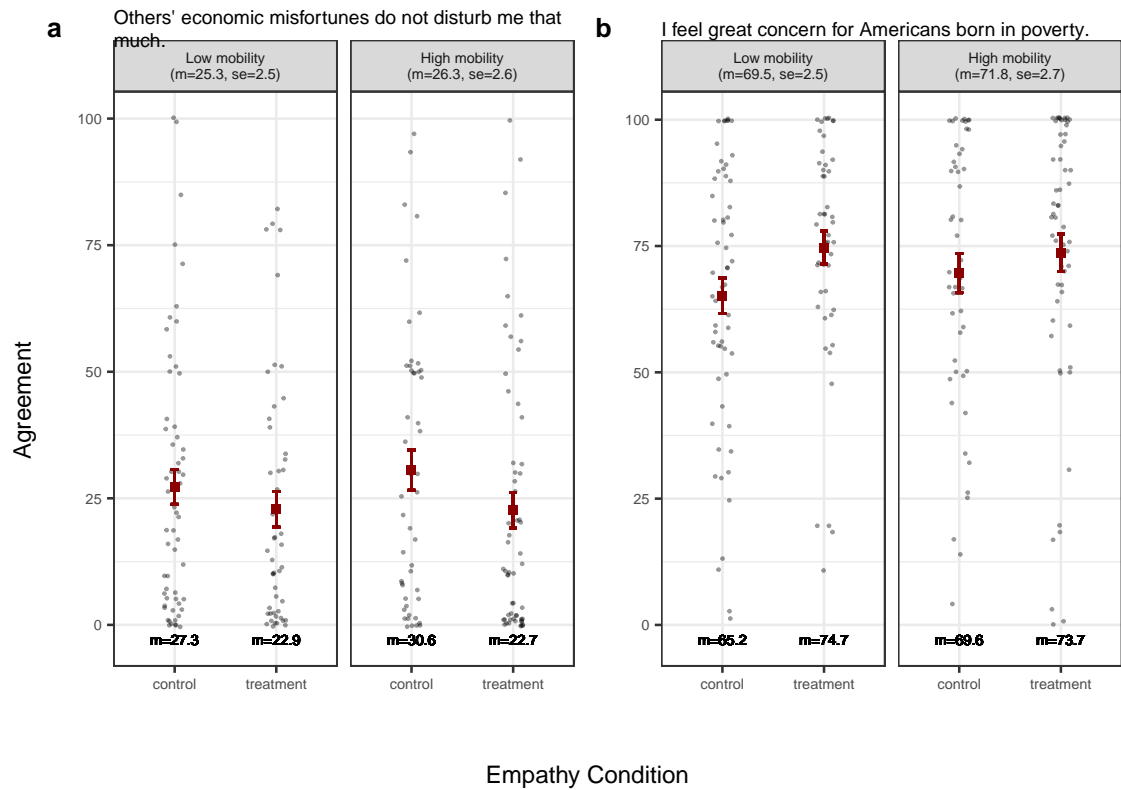| | Dependent variables: Support for welfare policies | | | | | | |
	General	Food stamps	Insurance	For poor	For hard-working	Higher ed.	Preschool
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Constant	75.26***	74.30***	73.73***	76.08***	73.64***	72.90***	64.61***
	(4.01)	(4.40)	(4.11)	(4.33)	(4.05)	(4.53)	(4.32)
Low Mobility	−17.59***	−23.95***	−18.19***	−24.16***	−16.08***	−20.11***	−20.40***
	(5.42)	(5.95)	(5.56)	(5.85)	(5.48)	(6.12)	(5.84)
Poverty	−10.02*	−11.03*	−7.83	−12.76**	−8.25	−11.66*	−12.57**
	(5.44)	(5.97)	(5.58)	(5.87)	(5.50)	(6.14)	(5.87)
Low Mobility:Poverty	22.55***	29.23***	22.45***	29.50***	20.45***	19.75**	19.58**
	(7.67)	(8.43)	(7.87)	(8.29)	(7.76)	(8.67)	(8.28)
Observations	211	211	211	211	211	211	211
R^2	0.05	0.08	0.06	0.08	0.04	0.05	0.06
Adjusted R^2	0.04	0.07	0.04	0.07	0.03	0.04	0.04
Residual Std. Error (df = 207)	27.75	30.48	28.47	29.98	28.08	31.36	29.95
F Statistic (df = 3; 207)	3.87**	6.05***	4.12***	6.13***	3.23**	3.61**	4.13***

Note: *p<0.1; **p<0.05; ***p<0.01

3.2 Support for welfare policy adjusted for demographics

Figure 13: Effect plot for the two conditions, their interaction while controlling for education, gender, race, age, and income

Table 10: Regression table for welfare preferences adjusted for demographics

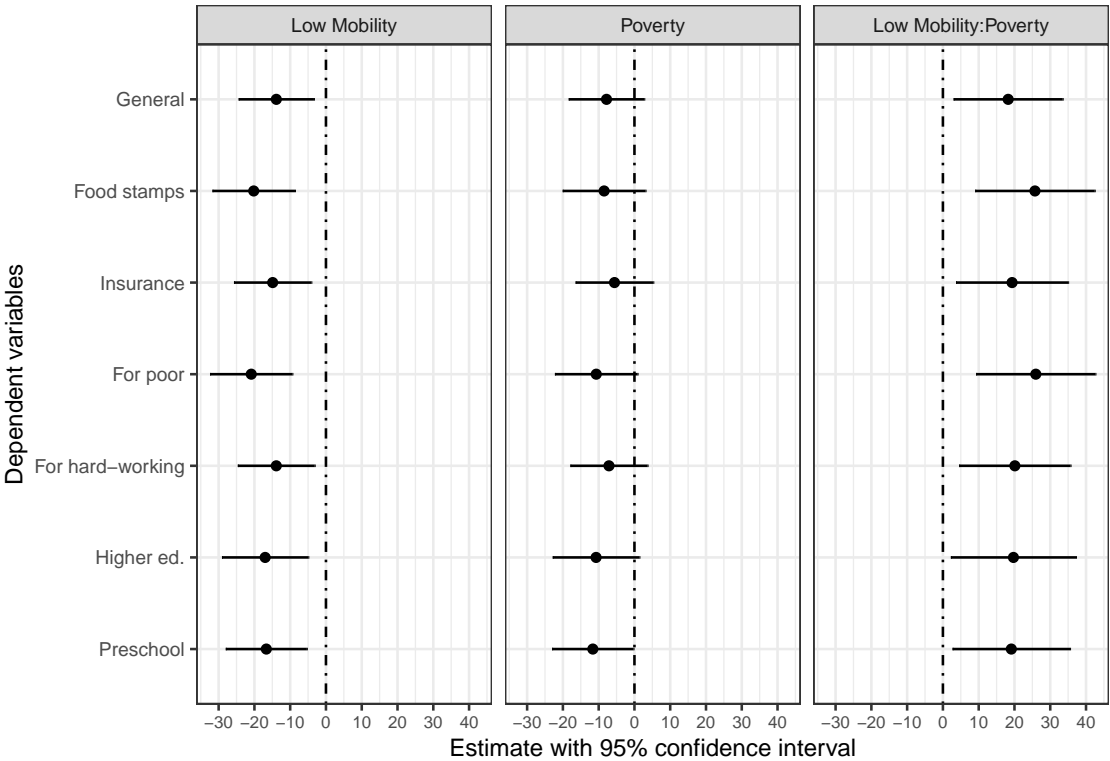|	Dependent variables: Support for welfare policies						
	General	Food stamps	Insurance	For poor	For hard-working	Higher ed.	Preschool
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Constant	−181.97	−350.51	−286.14	−262.22	−117.72	−225.58	−552.39*
	(300.87)	(329.85)	(309.33)	(329.08)	(307.35)	(345.14)	(324.08)
Low Mobility	−13.88***	−20.20***	−14.90***	−20.88***	−13.89**	−17.00***	−16.67***
	(5.33)	(5.85)	(5.48)	(5.83)	(5.45)	(6.12)	(5.75)
Poverty	−7.81	−8.48	−5.58	−10.67*	−7.11	−10.72*	−11.63**
	(5.36)	(5.87)	(5.51)	(5.86)	(5.47)	(6.14)	(5.77)
College degree	−1.42	−0.65	−1.59	1.72	1.51	−2.79	−3.76
	(5.86)	(6.43)	(6.03)	(6.41)	(5.99)	(6.73)	(6.32)
Postgraduate	−0.90	3.28	−0.13	3.19	2.42	3.01	−3.51
	(7.61)	(8.35)	(7.83)	(8.33)	(7.78)	(8.73)	(8.20)
Male	−1.34	−6.17	−4.16	−2.91	−9.05**	−10.64**	−9.37**
	(4.01)	(4.40)	(4.13)	(4.39)	(4.10)	(4.60)	(4.32)
Black/African-American	−7.85	−9.31	−7.28	−10.48	−3.93	−0.40	−0.03
	(10.93)	(11.98)	(11.24)	(11.96)	(11.17)	(12.54)	(11.78)
Latino/Hispanic	2.47	−10.62	−11.50	−4.44	−10.36	−16.31	−13.31
	(10.11)	(11.08)	(10.39)	(11.05)	(10.32)	(11.59)	(10.89)
Other	−8.82	−20.85*	−22.94*	−16.04	−8.45	−17.70	−17.02
	(11.34)	(12.43)	(11.66)	(12.41)	(11.59)	(13.01)	(12.22)
White/Caucasian	−7.12	−12.11	−11.12	−9.42	−8.81	−20.18**	−16.98**
	(7.08)	(7.76)	(7.28)	(7.74)	(7.23)	(8.12)	(7.63)
Year of Birth	0.14	0.23	0.19	0.18	0.11	0.17	0.33**
	(0.15)	(0.17)	(0.16)	(0.17)	(0.15)	(0.17)	(0.16)
Income	−0.0002***	−0.0002***	−0.0002***	−0.0002***	−0.0002***	−0.0001**	−0.0001**
	(0.0000)	(0.0000)	(0.0000)	(0.0000)	(0.0000)	(0.0001)	(0.0000)
Low Mobility:Poverty	18.24**	25.73***	19.33**	25.96***	20.11**	19.71**	19.12**
	(7.73)	(8.47)	(7.95)	(8.45)	(7.90)	(8.87)	(8.33)
Observations	210	210	210	210	210	210	210
R^2	0.17	0.19	0.17	0.17	0.14	0.14	0.17
Adjusted R^2	0.12	0.15	0.12	0.12	0.09	0.09	0.12
Residual Std. Error (df = 197)	26.59	29.15	27.34	29.08	27.16	30.50	28.64
F Statistic (df = 12; 197)	3.29***	3.96***	3.28***	3.41***	2.75***	2.64***	3.34***

Note: *p<0.1; **p<0.05; ***p<0.01

3.3 Mediators

Figure 14: Effect plot for regressing the mediators on the two conditions and their interaction

Table 11: Regression table for mediators on the two conditions and their interaction

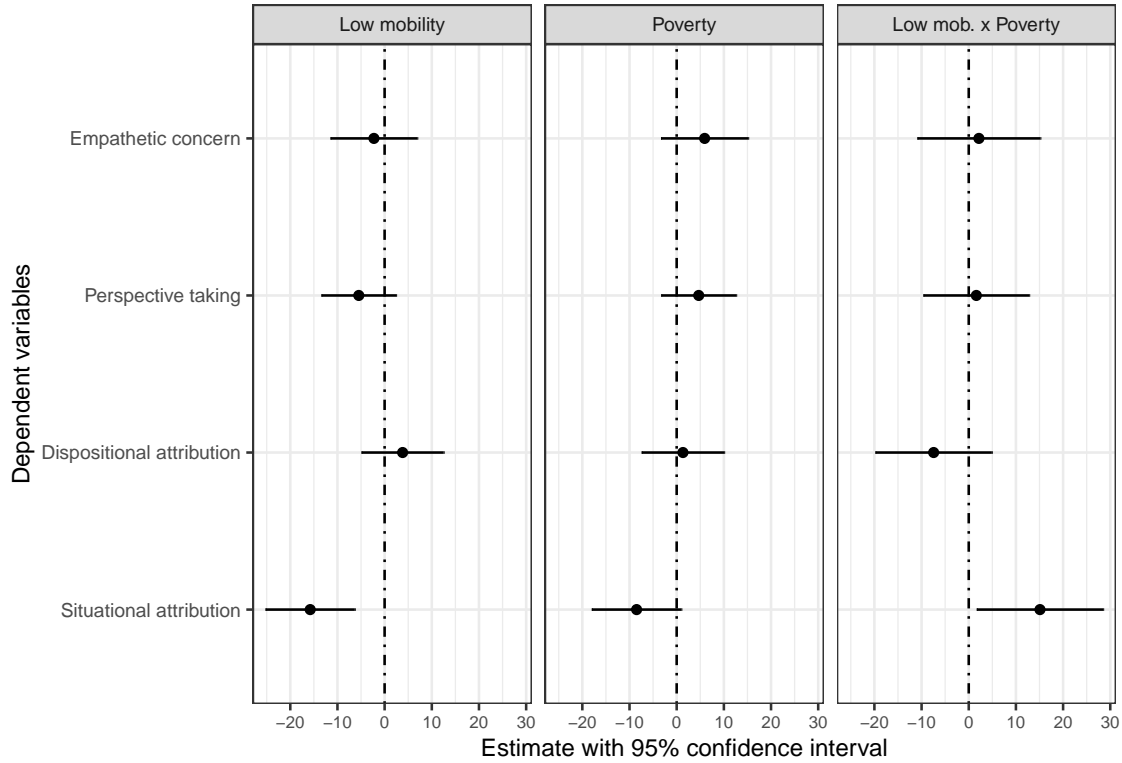|	Dependent variables:			
	Empathetic concern	Perspective taking	Dispositional attribution	Situational attribution
	(1)	(2)	(3)	(4)
Constant	70.09***	81.52***	42.19***	64.31***
	(3.45)	(2.97)	(3.27)	(3.55)
Low Mobility	−2.27	−5.48	3.81	−15.78***
	(4.67)	(4.01)	(4.42)	(4.80)
Poverty	5.93	4.67	1.33	−8.50*
	(4.68)	(4.03)	(4.43)	(4.82)
Low Mobility:Poverty	2.15	1.61	−7.44	15.10**
	(6.61)	(5.69)	(6.26)	(6.80)
Observations	211	211	211	211
R^2	0.02	0.03	0.01	0.05
Adjusted R^2	0.01	0.02	-0.005	0.04
Residual Std. Error (df = 207)	23.91	20.57	22.63	24.58
F Statistic (df = 3; 207)	1.64	2.38*	0.67	3.61**

Note: *p<0.1; **p<0.05; ***p<0.01
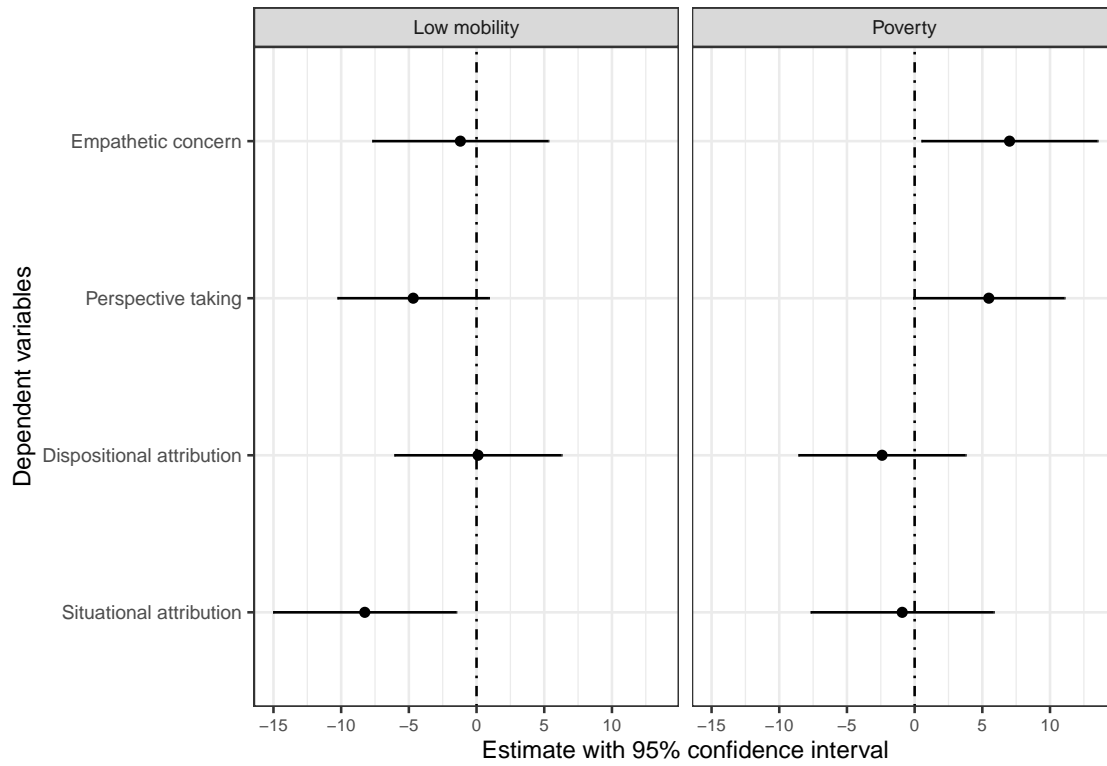
Figure 15: Effect plot for regressing mediators on the two conditions (without interaction)

Table 12: Regression table for mediators on the two conditions (without interaction)

	Dependent variables:			
	Empathetic concern	Perspective taking	Dispositional attribution	Situational attribution
	(1)	(2)	(3)	(4)
Constant	69.50***	81.08***	44.21***	60.19***
	(2.94)	(2.53)	(2.79)	(3.05)
Low Mobility	−1.20	−4.68	0.11	−8.26**
	(3.30)	(2.84)	(3.13)	(3.43)
Poverty	7.01**	5.48*	−2.41	−0.92
	(3.30)	(2.84)	(3.13)	(3.43)
Observations	211	211	211	211
R^2	0.02	0.03	0.003	0.03
Adjusted R^2	0.01	0.02	-0.01	0.02
Residual Std. Error (df = 208)	23.86	20.52	22.65	24.81
F Statistic (df = 2; 208)	2.41*	3.54**	0.30	2.90*

Note: *p<0.1; **p<0.05; ***p<0.01

3.4 Mediators adjusted for demographics

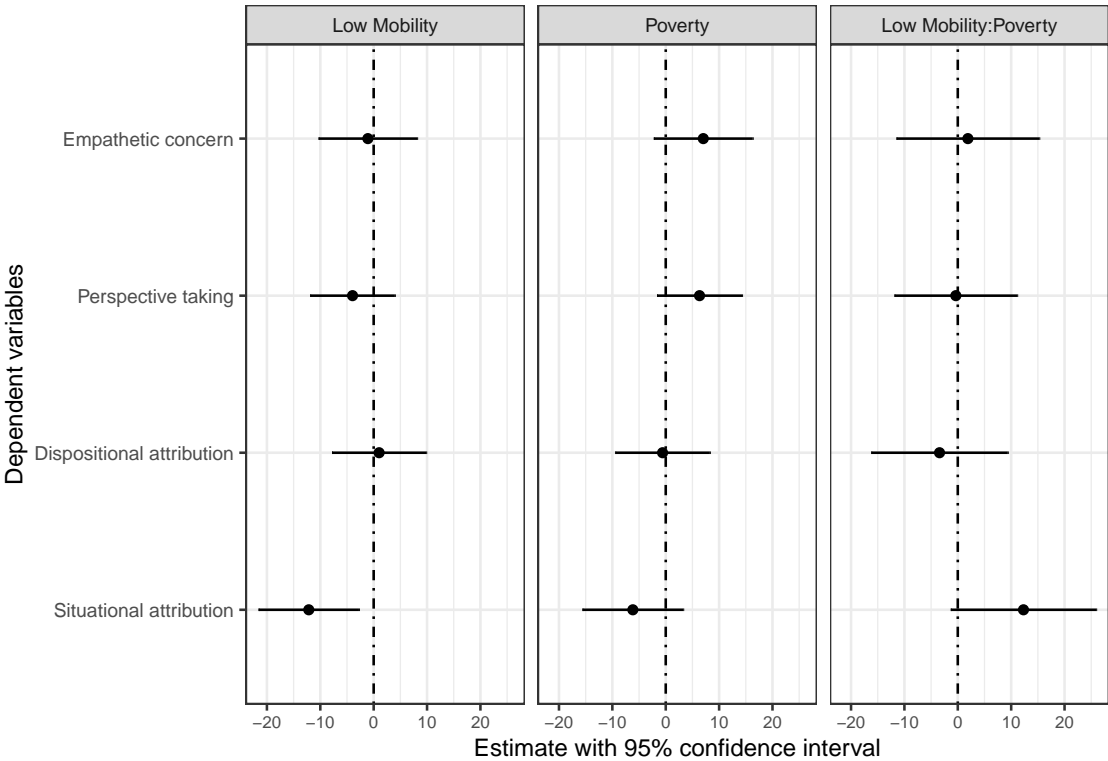Figure 16: Effect plot for regressing mediators on the two conditions and their interaction adjusted for demographics variables

Table 13: Regression table for mediators on conditions and their interaction adjusted for demographics

	Dependent variables: Support for welfare policies			
	Empathetic concern	Perspective taking	Dispositional attribution	Situational attribution
	(1)	(2)	(3)	(4)
Constant	328.13	233.93	604.45**	−367.71
	(264.02)	(226.91)	(252.37)	(268.86)
Low Mobility	−1.09	−3.96	1.02	−12.16**
	(4.68)	(4.02)	(4.47)	(4.77)
Poverty	7.03	6.33	−0.59	−6.16
	(4.70)	(4.04)	(4.49)	(4.79)
College degree	−8.55*	−2.41	−3.14	0.10
	(5.14)	(4.42)	(4.92)	(5.24)
Postgraduate	−11.60*	−3.10	−7.12	2.36
	(6.68)	(5.74)	(6.38)	(6.80)
Male	−5.18	−4.39	5.42	−9.35***
	(3.52)	(3.03)	(3.37)	(3.59)
Black/African-American	−5.49	−2.11	−1.01	4.22
	(9.59)	(8.24)	(9.17)	(9.77)
Latino/Hispanic	−10.59	−0.09	−10.87	−3.06
	(8.87)	(7.62)	(8.48)	(9.03)
Other	−12.91	−5.48	9.40	−14.44
	(9.95)	(8.55)	(9.51)	(10.14)
White/Caucasian	−8.38	−0.82	−4.40	−9.95
	(6.21)	(5.34)	(5.94)	(6.33)
Year of Birth	−0.12	−0.07	−0.28**	0.23*
	(0.13)	(0.11)	(0.13)	(0.14)
Income	−0.0001***	−0.0001***	0.0001	−0.0001***
	(0.0000)	(0.0000)	(0.0000)	(0.0000)
Low Mobility:Poverty	1.89	−0.37	−3.42	12.31*
	(6.78)	(5.83)	(6.48)	(6.91)
Observations	210	210	210	210
R^2	0.11	0.12	0.07	0.15
Adjusted R^2	0.06	0.07	0.01	0.10
Residual Std. Error (df = 197)	23.33	20.05	22.30	23.76
F Statistic (df = 12; 197)	2.02**	2.28***	1.23	3.01***

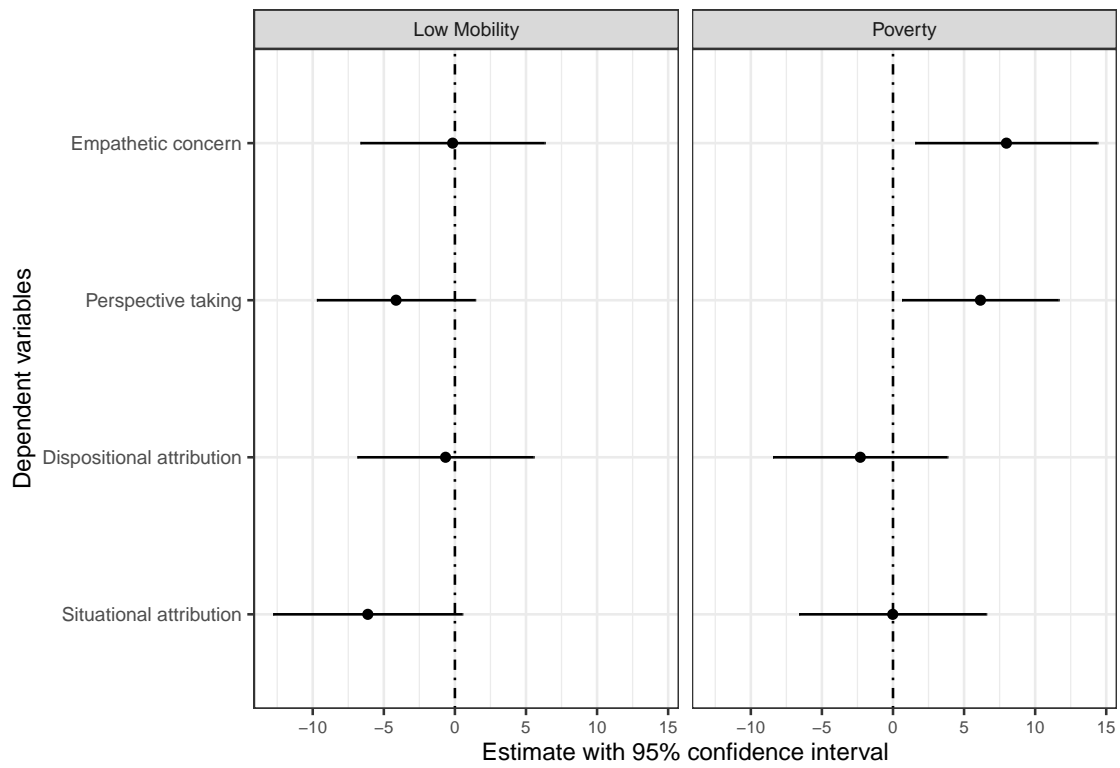*Note:* *p<0.1; **p<0.05; ***p<0.01

Figure 17: Effect plot for the two conditions (without interaction) adjusted for demographics

Table 14: Regression table for mediators on conditions (without interaction) adjusted for demographics

	Dependent variables:			
	Empathetic concern	Perspective taking	Dispositional attribution	Situational attribution
	(1)	(2)	(3)	(4)
Constant	323.91	234.75	612.08**	−395.18
	(262.97)	(225.96)	(251.49)	(269.89)
Low Mobility	−0.16	−4.14	−0.66	−6.13*
	(3.29)	(2.82)	(3.14)	(3.37)
Poverty	7.98**	6.15**	−2.30	−0.02
	(3.25)	(2.79)	(3.11)	(3.34)
College degree	−8.57*	−2.40	−3.10	−0.04
	(5.13)	(4.41)	(4.91)	(5.27)
Postgraduate	−11.45*	−3.13	−7.39	3.33
	(6.64)	(5.71)	(6.35)	(6.82)
Male	−5.16	−4.39	5.39	−9.25**
	(3.51)	(3.02)	(3.36)	(3.61)
Black/African-American	−5.38	−2.13	−1.21	4.93
	(9.56)	(8.22)	(9.15)	(9.81)
Latino/Hispanic	−10.11	−0.18	−11.74	0.06
	(8.68)	(7.46)	(8.30)	(8.91)
Other	−13.11	−5.45	9.76	−15.74
	(9.90)	(8.51)	(9.47)	(10.16)
White/Caucasian	−8.21	−0.85	−4.70	−8.88
	(6.17)	(5.30)	(5.90)	(6.33)
Year of Birth	−0.12	−0.07	−0.29**	0.24*
	(0.13)	(0.11)	(0.13)	(0.14)
Income	−0.0001***	−0.0001***	0.0001*	−0.0001***
	(0.0000)	(0.0000)	(0.0000)	(0.0000)
Observations	210	210	210	210
R^2	0.11	0.12	0.07	0.14
Adjusted R^2	0.06	0.07	0.02	0.09
Residual Std. Error (df = 198)	23.28	20.00	22.26	23.89
F Statistic (df = 11; 198)	2.20**	2.50***	1.32	2.96***

Note: *p<0.1; **p<0.05; ***p<0.01

4 Moderated-mediation analysis

Effects in the low mobility condition
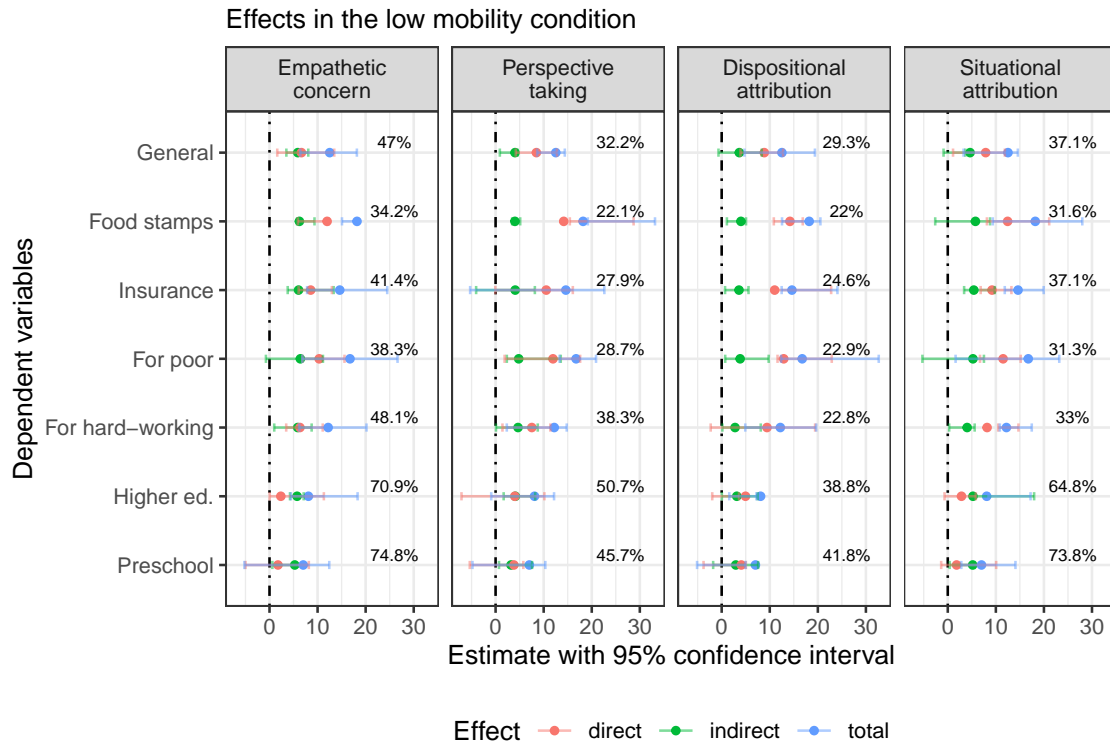
Figure 18: Direct, indirect, and total effects in the low mobility condition with % explained by mediator
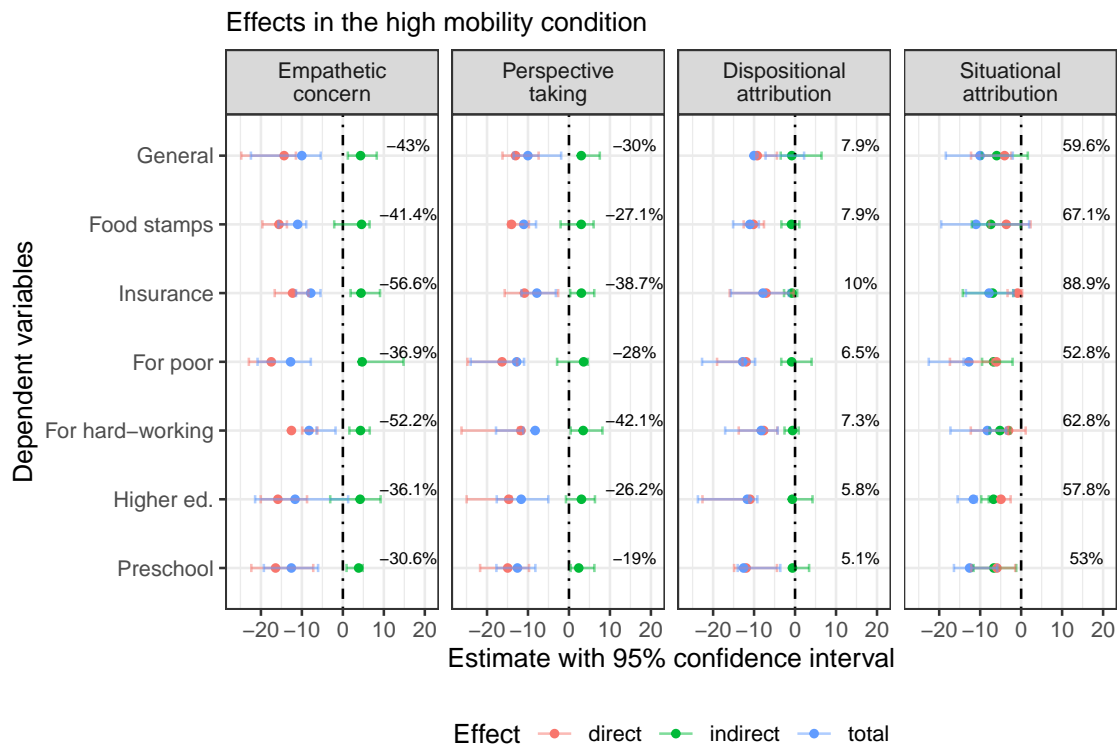
Effects in the high mobility condition

Figure 19: Direct, indirect, and total effects in the high mobility condition with % explained by mediator

5 Key takeaways

5.1 Interaction effect

The effect of exposure to poverty depends on whether respondents find themselves in a high or low mobility society. Consider support for general welfare policies as an example; the general pattern holds among all dependent variables (fig. 12), even when controlling for demographics (fig. 13):

In the high mobility condition, participants in the exposure to poverty condition reported marginally significantly lower support for welfare policy than participants in the control condition ($B = -10.02, se = 5.44, t(207) = -1.84, p = 0.067$). In the low mobility condition, participants in the exposure to poverty condition reported significantly higher support for welfare policy than participants in the control condition ($B = 12.53, se = 5.42, t(207) = 2.31, p = 0.022$). Support for general welfare policy was significantly stronger in the low mobility than in the high the mobility condition ($B = 22.55, se = 7.67, t(207) = 2.94, p = 0.004$).
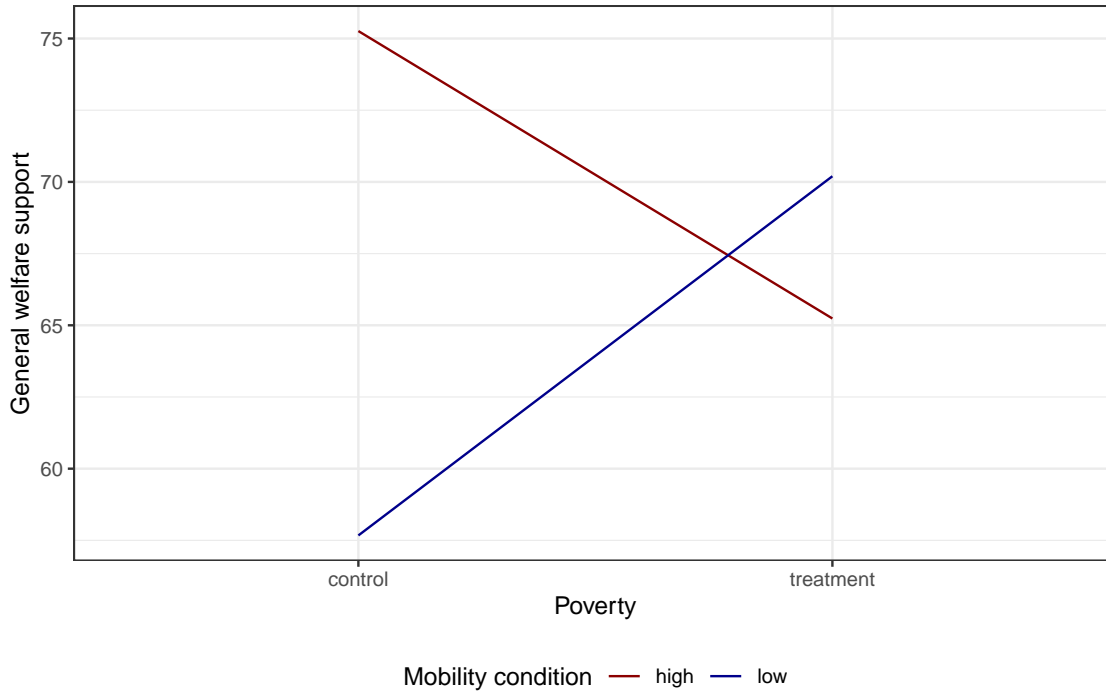

Figure 20: General support for welfare policies

5.2 Moderated Mediation

The mediators explain the effect of exposure to poverty in the low but not in the high mobility condition. The only exception is situational attribution to poverty in the high mobility condition (fig. 18 and fig. 19).

The effect of the exposure to poverty condition was mediated by ...

1. **empathetic concern** in the low mobility but not in the high mobility condition. In the low mobility condition, empathy explains at least 1/3 and at most 3/4 of the effect of poverty exposure on welfare policy support. The mediation was strongest for childhood interventions and weakest for food stamps.
2. **perspective taking** in the low but not in the high mobility condition. Perspective taking explains less of the total effect of poverty exposure than empathetic concern.
3. **dispositional attributions** in the low mobility condition (from 22% to 42% explained) but exposure to poverty was only marginally mediated in the high mobility condition (from 5% to 8% explained).
4. **situational attributions** in the low mobility condition (from 31% to 48% explained) and even stronger in high mobility condition (from 53% to 89% explained).

5.3 Unexpected results

1. Respondents in the high mobility condition are more likely to support welfare policies than those in the low mobility condition. If respondents have not been exposed to poverty, the average support for general welfare is about 75.26 in the high mobility and 57.67 in the low mobility condition.
2. In the low mobility condition, situational attribution is not a stronger mediator than dispositional attribution. Instead, these mediators explain the total effect of the exposure to poverty condition similarly well.
3. In the high mobility condition, dispositional attribution is not a stronger mediator than situational attribution. To the contrary, the mediation through situational attribution is strongest among all mediators while mediation through dispositional attribution is weak.

One explanation is that respondents might attribute high mobility to welfare policies and would therefore endorse an even more comprehensive welfare state. One might therefore want to ask participants how extensive and efficient they perceive extant welfare policies.

This does not necessarily mean that respondents believe in the efficacy of welfare policies. In fact, situational attributions to poverty - such as the failure of the government to provide good schools - is the strongest mediator. Yet counterintuitively, the high mobility condition seems to lead respondents to consider structural rather individual factors (since situational attributions are highest and dispositional ones are low). In the "structural mindset", expanding welfare policies might appear plausible to respondents.